COSMOPOLITAN CHRONICLE

True tales from the annals of history, archaeology, construction, and restoration of the Casa de Bandini and Cosmopolitan Hotel.

Old Town San Diego State Historic Park

YOL. I, No. 12

SAN DIEGO, ALTA CALIFORNIA, MAY 30, 2008

PRICE: FREE

WHAT IS ADOBE?

WILLIAM F. MENNELL San Diego Coast District District Services Manager

he word "adobe" has appeared in a number of stories published in the Cosmopolitan Chronicle, but without really explaining what it is. It can refer to an architectural style, earthen brick, or a type of soil. Juan Bandini's grand home was an adobe in all three categories.

The word coming to us via Moorish Spain, it is derived from Arabic; *attôba*, *al-tôba*, meaning "the brick." The bricks are made of soil and water, usually with straw or grass added, pushed into a wooden form, and then dried in the sun for at least 2 weeks. The bricks weigh roughly 40 pounds each.

Although there are many types of earthen structures, the adobe buildings in Old Town are made of such bricks. The dried bricks were laid on a cobble stone foundation, mortared together with the same soil material, but no straw is added. Commonly thought of as clay, "good adobe" soil is actually about 65% sand, only about 25% clay. The

walls of the casa are about 3 feet thick. Given the size of Bandini's home, approximately 1900 square feet, and the thickness of the walls, at least 10,000 bricks were needed.

After the adobe bricks were laid, the walls were covered with a thick mud plaster. Traditionally, this was applied using small boards, or with bare hands. Horse or donkey manure was often added to increase the "stickiness" of the plaster. Plastering was often done in three coats, the first and thickest, the "scratch coat," was often scored, scratching the surface to assist with the second coats ability to adhere. The second coat is done as smooth as possible, often mixed with additional sand to reduce cracking. The third very thin coat fills the remaining hair-line cracks. A whitewash finish, made from a powder-like lime extracted from fired seashells, protected the adobe walls from moisture.

Adobe is also a style of architecture, characterized by thick earthen walls, small window and door opening relative to today, and often a flat or slightly sloped thatched or clay tile roofs.

Other types of earthen structures exist in other parts of the world. It is estimated that

currently 50% of the world's population live in some type of earthen structure. Rammed earth is popular in France. The original English Tudor style buildings, in the 15th century * were a type of earthen structure supported by wooden beams, and called "wattle and daub," or "cob on posts." In Western # Africa, adobe is called Butabu. Some Native Americans stacked layers of mud, letting them dry before the next layer. Parts of the Great Wall of China are made of adobe.

It is speculated that the Casa de Bandini, and the Casa de Estudillo, the 2 largest homes of the time in San Diego, were made by the same small, skilled, disciplined, and well-organized workforce. The population of San Diego in the 1820s was far less than the 1.2 million of today. Still, the number of local San Diego people that could build such a home today may be about the same as it was then.

